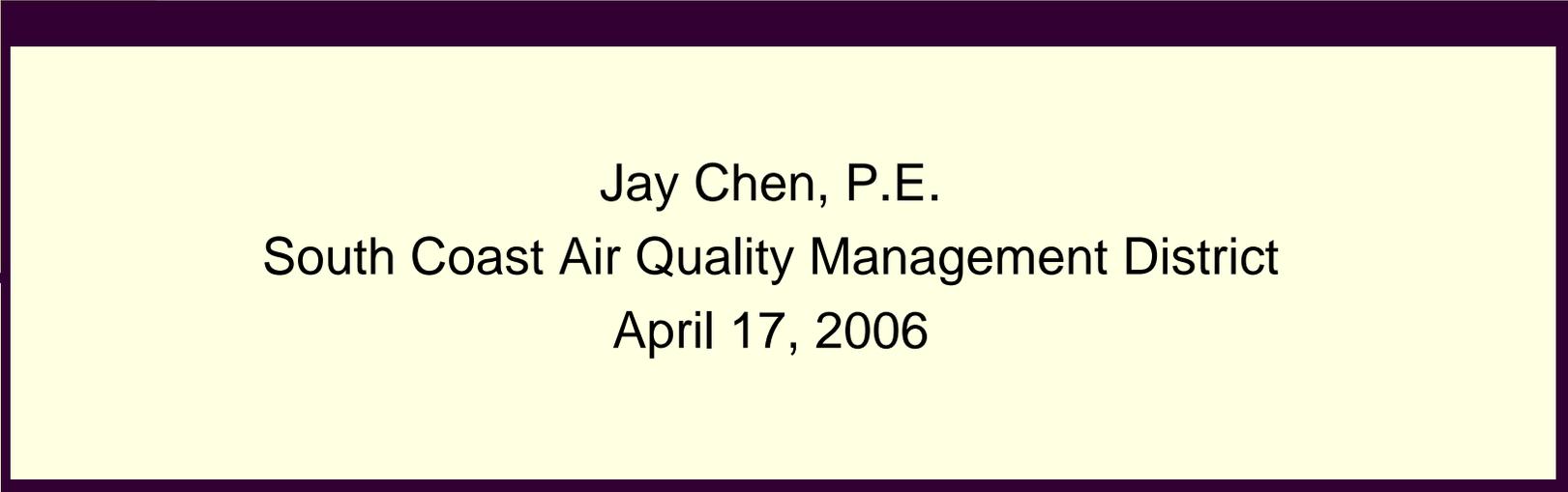




Emerging Technologies Forum Governmental Agency Perspectives



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April 17, 2006

California Air Quality Perspective

- California (especially South Coast) has some of the worst air pollution problems in the nation.
- California air quality regulations are designed in consideration of these problems.
- Air Resources Board/Cal-EPA oversees the state programs and directly regulates mobile sources.
- Air quality planning, rules, permitting and enforcement for stationary sources are delegated to 35 local districts:
 - Air Pollution Control Districts (single county)
 - Air Quality Management Districts (multi-counties, regional)

South Coast AQMD

- Jurisdiction covers Orange County and the most populated areas of Los Angeles, Riverside and San Bernardino Counties.
 - 16 million people
 - 10 million vehicles
 - 27,000 permitted facilities (60,000 permits)
 - Headquarters in Diamond Bar, California
- National air quality standards status
 - Extreme non-attainment for Ozone
 - Non-attainment for PM₁₀
 - Serious non-attainment for CO

Key Elements in Air Quality Permitting

- Adequate CEQA Analysis to address emissions in both construction and operation phases
- Pre-constructional New Source Review
 - Best Available Control Technology (BACT), emissions offset and dispersion modeling for criteria pollutants (VOC, NOx, PM₁₀, etc.)
 - Health Risk Assessment and BACT for air toxics (benzene, dioxins/furans, metals, etc.)
- Two-step permitting process
 - Permit to Construct
 - Based on estimated maximum potential emissions to determine compliance
 - Public notice, if applicable
 - Permit to Operate
 - Final permit after performance tests and field evaluations

Key Air Quality Issues with Conversion Technologies

- Levels of emission control and/or product refinement necessary to address direct (on-site) and indirect (product use) emissions
 - Affects the bottom line
- Reduced transportation emissions may not offset increased local impacts
 - Regional benefit vs. local toxic and odor issues
- Co-locating MRF/CT does not necessarily gain community acceptance
 - Existing public nuisance issues
 - Additional toxic emissions

Just a few thoughts

- Begin early to meet with local APCD or AQMD regarding specific requirements and potential information gaps.
- Involve local officials and community leaders early to learn about public concerns.
- Eliminate odors and other nuisance issues at TS/MRF (e.g., complete enclosure with odor filtration systems) if proposing co-location of CT.
- Enhance separation of metals (batteries etc.) from CT feedstock to further minimize direct and/or indirect emissions.
- Use technologies that have lowest emissions.